



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------------------|---------------------|------------------|
| 09/517,426 | 03/02/2000 | Veltmans Wilhelmina Helena Maria | 5475.00 | 4911 |

7590 08/13/2002

Dorsey & Whitney LLP
1001 Pennsylvania Avenue NW
Suite 300 South
Washington, DC 20004

EXAMINER

MILLER, EDWARD A

ART UNIT

PAPER NUMBER

3641

DATE MAILED: 08/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/517,426

Applicant(s)

MARIA ET AL.

Examiner

Edward A. Miller

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,9-12,14-16,18,20,21,23,25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,9-12,14-16,18,20,21,23,25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Art Unit: 3641

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 15 April 2002 has been entered.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1,2, 9-12,14-16, 18, 20, 21, 23, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Subramanian et al. in view of Mangum et al., and Somoza et al. I and II.

Subramanian et al. teach the basic invention of particle precipitation to form small size particles. Therein, as in the Abstract, precipitation is performed to form small crystals with the benefit of ultrasonic waves. Ultrasonic background is given from about col. 3, line 37- col. 4, line 39, with further detail in the paragraph bridging col. 5 and col. 6. Col. 4, lines 52-62 (line 62 specifically teaching explosives), and col. 17, lines 48-56 (line 56 teaching explosives), make it clear that the invention method is useful to make small size crystals of explosive ingredients. Further detail is taught throughout Subramanian et al., including in Example 12, with specific ultrasonic detail. In view of Mangum et al., and Somoza et al. I and II, it would have further been obvious to prepare specific notoriously well known explosive ingredients by such a crystallization process. In Mangum et al., col. 3, lines 30-45, ammonium perchlorate is crystallized in small sizes with ultrasonic

Art Unit: 3641

energy, with variation of process parameters to vary the results. Indeed, it appears that Mangum et al. in Example 5, col. 8, anticipates broad claims 1, 20 and 25, which require precipitation but without any limitation as to the type thereof. As to this point, anticipation is epitome of obviousness. *In re Pearson*, 181 USPQ 641 (CCPA 1974). In Somoza et al. I, col. 2, lines 8-49, use of ultrasonic energy during grinding is helpful to remove impurities from crystal surfaces to produce an improved product, and in Somoza et al. II, the Abstract, e.g., teaches that small size particles are less sensitive. Thus, it is perfectly clear that these processes will produce a beneficial product with small size, improved purity and reduced sensitivity. Variation of specific notoriously well known ingredients, or variation of well known parameters would have been obvious for the expected reasons taught in the references. It is well settled that optimizing a result effective variable is well within the expected ability of a person or ordinary skill in the subject art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

Applicants' arguments are not persuasive of error. As to the additional details such as using a supercritical anti-solvent, as argued, it is pointed out that the scope of the instant claims, e.g., "comprising", allows all such additional possibilities. As to the allegations regarding improved properties, where the product appears to be the same or only slightly different, the properties recited would appear to be inherent, regardless of the method of preparation. It must be pointed out that the frequencies and the precipitation of energetic materials is taught. Thus, the same results must be obtained. In any event, the Office does not have testing facilities to determine such. The burden falls on applicant to show that the prior art products do not necessarily or inherently possess the claimed properties. *In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964, 966; *In re Fitzgerald*, 619 F.2d 67, 70, 205 USPQ 594, 596; *In re Best*, 562 F.2d 1252, 1255; 195 USPQ 430, 433-434; *In re Brown*, 459 F.2d 531, 173 USPQ 685. Particularly, with such questions, attorney arguments are not a proper

Art Unit: 3641

substitute for a factual showing, related to the properties alleged, and to the claim terms, as in *Pearson*, supra. Further, see MPEP 716-716.02(e), for example, including the nexus requirement and the showing be comparable in scope with the claims terms.

5. Claims 1,2, 9-12,14-16, 18, 20, 21, 23, 25 and 26 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Markels et al..

It would appear that at least the broad claims are anticipated. Note Examples I, II and IV in col. 4, for example. Since the concrete limitations of the claims appear met, the functional result or properties must be obtained likewise. To the extent necessary, variation of a specific ultrasonic apparatus detail such as amplitude would have been obvious and a mere matter of routing optimization. See the case law cited above.

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1,2, 9-12,14-16, 18, 20, 21, 23, 25 and 26 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described or enabled in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In this case, the examples appear to deal solely with HNF. From a consideration of Zee et al., newly cited, it may appear that HNF is an atypical energetic material, compared to other such materials. Thus, particular procedures were required to obtain stable HNF as taught therein, which was contrary to the prior art at that time, as related to HNF. Thus, the specification is deemed to fail to disclose or teach a reasonable range of substances with which the claimed invention works as described and claimed. See MPEP 2164.06(b)-2164.08. Also compare *In re Surrey*, 151 USPQ 724

Art Unit: 3641

(CCPA 1966), where representative examples are required. This would particularly be the case where applicant has very broad claim scope, but very narrow exemplary support, and the claims are alleged to operate contrary to the teachings of the prior art, while the claims cover that or those (indeed, all energetic materials) energetic material(s) taught in the references, while the specification examples are only to HNF. This also includes the specific amplitudes alleged, which also may only be operative for HNF, as to any criticality. After all, the prior art suggests variation of such parameters in any event, which mitigates against criticality.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning either this or an earlier communication from the Examiner should be directed to Examiner Edward A. Miller at (703) 306-4163. Examiner Miller may normally be reached Monday-Thursday, from 10 AM to 7 PM.

If attempts to reach Examiner Miller by telephone are unsuccessful, his supervisor Mr. Carone can be reached at (703) 306-4198. The Group fax number is (703) 305-7687.

If there is no answer, or for any inquiry of a general nature or relating to the application status, please call the Group receptionist at (703) 308-1113.

Miller/em
August 7, 2002



EDWARD A. MILLER
PRIMARY EXAMINER